Remarks

Claims 92-97 and 99-114 are pending, claims 92-95 and 99-114 are withdrawn, claims 96 and 97 stand rejected. New claims 115-119 are added. Support for the new claims can be found in the specification as filed, particularly on page 53 and pages 89-98.

The Examiner has not indicated the status of claim 99 which has not been rejected. Claim 99 appears to be allowable and Applicants request confirmation of the allowability of claim 99.

Telephonic interview

Applicants thank the Examiner for the telephonic interview of November 24, 2009. Issues relating to the rejection of the claims were discussed. No agreement was reached.

35 U.S.C. § 103(a)

The Examiner has rejected claims 96-97 under 35 U.S.C. § 103(a) as being unpatentable over US2006/0223110 (Doweyko). Applicant disagrees for the reasons set forth below.

Doweyko is directed to the identification and structural definition of a second binding site in the ligand binding domain of nuclear hormone receptors. The disclosure also relates to methods for designing and identifying ligands of Site II and modulators of NHRs. Doweyko discloses on pages 28- 32, intermediates and methods used in the synthesis of compounds which are described as modulators of Nuclear Hormone Receptors. None of these intermediate compounds are described as possessing any pharmaceutical activity.

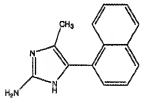
It is one of these intermediate of Doweyko which the Examiner has used as the basis for rejection under § 103(a).

Motivation to modify

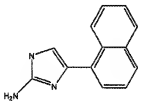
The Examiner states, on page 5 of the instant office action, that "a person of ordinary skill in the art would have been motivated to further modify the compounds disclosed by

Doweyko et. al. to add a methyl substitution instead of H on the imidazole ring". The present application relates to antagonists of the 5-HT_{2B} receptor. Applicants submit that one of skill in the art looking to develop compounds as antagonists of a 5-HT_{2B} receptor would not choose to modify the intermediate compounds of Doweyko which are used for the synthesis of compounds to be tested for binding to Nuclear Hormone Receptor Site II. There is no teaching in Doweyko that these compounds have any pharmacological activity, let alone activity as an 5-HT_{2B} receptor antagonist. One of skill in the art would have had no reason to expect that the intermediates of Doweyko would have any activity as an 5-HT_{2B} receptor antagonist.

In making this rejection, the Examiner contends that the compound,

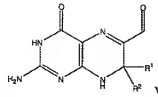


which is encompassed by the currently amended claim, is obvious over the following compound from Doweyko:

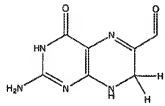


because "hydrogen and methyl are deemed obvious variants".

To support this contention, the Examiner cites In-re Wood 199 USPQ 137. Applicants submit that In re Wood does not stand for the proposition that hydrogen and methyl are equivalent in all cases. The court was reviewing the decision of the PTO Board of Appeals that certain Pteridine compounds of patent application serial No. 438,379, were obvious over a particular prior art reference (Mitsuda). This review only dealt with the narrow question of whether the Pteridine compounds:



wherein R^1 and R^2 are the same or different and each is lower alkyl, were obvious over the compound of Mitsuda wherein R^1 and R^2 are H, as shown below:



The compounds of the present invention are not Pteridine based compounds but rather are compounds which comprise an imidizole ring. The Examiner is extrapolating the conclusion of In re Wood to conclude that a substitution of methyl for H on an imidizole ring would be obvious. Applicants respectfully disagree with the Examiner's position.

Conclusion

Applicants submit that all of the pending claims 96, 97, 99 and 115-119 are in condition for allowance. Applicants request reconsideration, withdrawal of the objections and rejections, rejoinder of the method claims (109, 112, 113, and 114), and allowance of the application. The Examiner is invited to contact the undersigned attorney via telephone if such communication would expedite the allowance of the application.

It is understood by the Applicants that this paper requires a fee; and authorization is given to charge any necessary filing fees and any additional fees or credit any overpayment to Deposit Account Number 503145, referencing attorney docket number 224823/PO18 US/127425.

Respectfully submitted,

By: Honigman Miller Schwartz and Cohn LLP

Date 11/24/09

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